

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications)	PS Docket No. 15-80
)	
New Part 4 of the Commission's Rules Concerning Disruptions to Communications)	ET Docket No. 04-35
)	
The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers)	PS Docket No. 11-82
)	

**REPLY COMMENTS OF THE ALLIANCE FOR
TELECOMMUNICATIONS INDUSTRY SOLUTIONS**

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SUMMARY

ATIS notes that there is significant support among commenters that new Broadband Internet Access Service (BIAS) and dedicated business services reporting rules are not necessary and should not be adopted. ATIS also notes that many commenters share ATIS' views that the *FNPRM* fails to provide any evidence regarding problems with outages for packet-based dedicated business services that would warrant additional reporting obligations for these services.

Many commenters also agree that that new reporting requirements for “unintended changes to software or firmware or unintended modifications to a database” are unnecessary. Instead of new regulatory mandates, ATIS supports the collaborative approach, and allowing public-private partnerships to address cybersecurity issues as part of voluntary initiatives.

To the extent that BIAS rules are nonetheless adopted, ATIS recommends that the Commission modify its rules to reflect the widely agreed upon industry input. ATIS notes that, to the extent that outage reporting obligations are extended to BIAS, there is broad support among commenters that: (1) “hard down” outages should be based on impact of outages on consumers (i.e., on a user-minute rather than throughput-based metric); (2) providers should not be required to report on performance degradation; and (3) BIAS providers should not be required to serve as a central reporting entity for broadband outages.

There is also broad opposition among commenters to the Commission call failure reporting proposals because the rules would not capture outages and would require significant and unnecessary burdens to service providers in order to reengineer network metrics to capture the required data.

ATIS notes that the need for, and benefits of, a streamlined reporting process has been identified by numerous commenters. Many commenters support ATIS' proposed two-step process under which providers would be required to submit Notifications within 24 hours of the discovery of a reportable outage and Final Notifications within 30 days of the submission of the Notification.

Finally, regarding that sharing of confidential Network Outage Reporting System (NORS) data, in addition to ensuring that states and federal agencies can and will adequately protect sensitive outage information, ATIS supports additional protections proposed by many commenters relative to state access to NORS data.

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**REPLY COMMENTS OF THE ALLIANCE FOR
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The Alliance for Telecommunications Industry Solutions (ATIS), on behalf of its Network Reliability Steering Committee (NRSC), hereby submits these reply comments in response to *Further Notice of Proposed Rulemaking (FNPRM)*, released May 26, 2016, in the above-referenced dockets. ATIS notes that there is significant agreement among commenters that new Broadband Internet Access Service (BIAS) and dedicated business services reporting rules are not necessary and should not be adopted. To the extent that BIAS rules are nonetheless adopted, ATIS recommends that the Commission modify its rules to reflect industry input as explained more fully below.

I. Comments

A. There Is Strong Opposition to the Commission's Proposals to Expand Part 4 Outage Reporting Obligations to BIAS and Dedicated Business Services

In its comments to the *FNPRM*, ATIS opposed the Commission's proposal to expand network outage requirements to BIAS, noting that the new rules are unwarranted and would be overly burdensome to the industry.¹ Many commenters share this view and urge the Commission not to adopt its proposed rules.

ATIS agrees with commenters that the Commission has failed to justify why its proposed new BIAS reporting obligations are necessary. As the United States Telecom Association (USTelecom) notes, the *FNPRM* "lacks any substantive discussion or analysis of the professed public safety benefits that would result from implementation of the Commission's BIAS outage reporting regime."² Instead, the Commission in the *FNPRM* simply explains that the new BIAS will provide it with "necessary situational awareness" about broadband networks. However, the Commission does not disclose in any substantive manner how its "situational awareness" will materially improve the reliability and resiliency of broadband networks; nor does it provide any justification for how such data will help the agency "perform its mission more effectively."³

As ATIS noted in its comments, another reason that the new rules are unnecessary is that market forces already incent service providers to provide and maintain reliable service.⁴ AT&T Services, Inc. (AT&T) urges the Commission not to extend its Part 4 reporting obligations to BIAS or dedicated services "absent a showing of regulatory necessity in the face of market

¹ ATIS Comments at pp.3-5.

² USTelecom Comments at p. 3.

³ *FNPRM* at ¶93; USTelecom Comments at p. 4.

⁴ ATIS Comments at p.4.

failure (which it cannot show).”⁵ ATIS disagrees with the California Public Utilities Commission (CPUC)’s position that the existence of competitive forces that promote safe and reliable service is “completely separate from the importance of outage reporting for public safety purposes.”⁶ ATIS believes that new outage reporting requirements should be implemented only if market forces are not effective in promoting reliable service to consumers and notes that there has been no evidence that marketplace forces are not effective in promoting broadband reliability.

Another reason that new rules are unnecessary, as ATIS pointed out in its comments, is because broadband networks are inherently reliable.⁷ Contrary to the Commission’s assessment that broadband networks are just as vulnerable to physical outages and service disruptions as legacy networks,⁸ commenters correctly note that broadband networks are more reliable than legacy networks. AT&T explains that “[t]he robust and dynamic engineering of broadband networks enables redundancy and resiliency beyond the bounds of the static [(public switched telephone network)] PSTN.”⁹ Comcast Corporation (Comcast) adds that “broadband networks have many built-in redundancies and few single points of failure” and that “[r]outing and re-routing of information occurs automatically to avoid congestion and failures in connectivity.”¹⁰ CenturyLink, Inc. (CenturyLink) agrees and notes that “[g]iven how robustly these networks are designed and the considerable competitive pressures providers face to deliver high quality, reliable service to their customers, outage reporting is simply not needed to drive enhanced reliability.”¹¹ As USTelecom correctly points out, “the decentralized nature of [broadband]

⁵ AT&T Comments at p. 5.

⁶ CPUC Comments at p. 6.

⁷ ATIS Comments at pp. 3-4.

⁸ *FNPRM* at ¶102.

⁹ AT&T Comments at p. 5.

¹⁰ Comcast Comments at pp. 4-5.

¹¹ CenturyLink Comments at p. 5.

network[s], combined with wide adoption of industry best practices, has contributed over time to creating one of the most reliable communications infrastructures in the world.”¹²

ATIS also supports those commenters that note that there is no reason for new reporting requirements for mobile BIAS.¹³ Not only is there significant overlap between the proposed new rules and the existing Part 4 reporting requirements for Cellular Mobile Radio System (CMRS) that would make new reporting requirements duplicative and unnecessary, but, as CTIA – The Wireless Association (CTIA) notes, it is very unlikely that an outage on mobile providers’ networks would affect only mobile BIAS but not voice or messaging. “[M]obile IP networks that transmit BIAS rely on packet switching, which divides the transmission into packets and sends them over the fastest available route. Mobile broadband networks are designed to reroute traffic if portions of the network become inoperable. For this reason, an outage affecting only a part of a CMRS provider’s IP network would typically not prevent the IP network from continuing to send and receive traffic – meaning no outage for the end user.”¹⁴

Instead of new regulatory mandates related to BIAS, ATIS supports the comments of The Wireless Internet Service Providers Association (WISPA) that the Commission should promote the continued development and utilization of industry best practices as a less burdensome way in which service providers can respond to and minimize outages.¹⁵ ATIS continues to believe that a collaborative approach is more effective than regulatory mandates in both promoting reliability, developing best practices and addressing evolving reliability-related challenges. Moreover, ATIS believes that, to the extent that additional information about the operation, maintenance and future development of broadband networks is necessary, the Commission should collaborate

¹² USTelecom Comments at p. 12.

¹³ *See also*, CTIA Comments at p. 5, AT&T Comments at p. 10, T-Mobile Comments at p. 5.

¹⁴ CTIA Comments at p. 6.

¹⁵ WISPA Comments at pp. 6-7.

with industry groups such as the NRSC, to provide guidance on the collection of this information on a voluntary basis.

ATIS also supports the comments made by numerous parties regarding the unnecessary burdens that would be imposed by the proposed new rules. NTCA – the Rural Broadband Association (NTCA) recommends that the Commission “accurately identify and account for the subsequent reporting burden on service providers, ensuring that by updating its rules the Commission is not installing new, more burdensome, and strenuous requirements that serve little or no value to the agency, consumers, or other stakeholders.”¹⁶ AT&T notes that the proposed BIAS reporting rules would require “a massively complex and costly undertaking to manage so many reports, many of which would not be major failures warranting government attention but would mostly be routine outages in the normal course of network operations—many might not even affect customers.”¹⁷

Similarly, many commenters share ATIS’ views that the Commission’s proposals related to dedicated services are unnecessary and should not be implemented. USTelecom explains that, given that the market for dedicated services provided to large enterprise customers is extremely robust and highly competitive, “it makes little sense for the Commission to apply stringent reporting obligations on top of contractual guarantees.”¹⁸ The American Cable Association (ACA) notes requiring dedicated service providers to report in situations where the customer does not require such information, and in fact is not willing to pay for advanced quality of service guarantees, “would be the equivalent of an unfunded mandate” and “is not necessary to

¹⁶ NTCA Comments at p. 4.

¹⁷ AT&T Comments at p. 9.

¹⁸ USTelecom Comments at p. 15.

enhance the Commission’s ‘situational awareness’ or role in ensuring improved network reliability in the dedicated services sector.”¹⁹

Moreover, as Comcast correctly notes, the *FNPRM* fails to provide any evidence regarding problems with outages for packet-based dedicated business services that would warrant additional reporting obligations for dedicated business services.²⁰ Furthermore, as ATIS noted in its comments and is supported by other commenters, “dedicated services are analogous to major transport services” and therefore already addressed under the existing Part 4 rules.²¹ AT&T agrees that the Commission should reject new and additional reporting requirements for dedicated services as much of this data is already captured by the Commission’s existing network outage reporting rules. “Duplicative reporting imposes costs without any corresponding benefit.”²² ATIS notes there has been no clear technology-neutral approach identified by the commenters to date, which strongly indicates there is much work to be done before proposing any outage reporting rules for BIAS or dedicated services.

B. New Cybersecurity Reporting Requirements Are Unnecessary

In its comments, ATIS opposed as unnecessary new reporting requirements for “unintended changes to software or firmware or unintended modifications to a database.”²³ ATIS’ view on this matter is shared by numerous commenters.

CenturyLink agrees with ATIS that providers are already reporting instances of network outages attributable to cybersecurity incidents within NORS.²⁴ ACA suggests that the

¹⁹ ACA Comments at p. 25.

²⁰ Comcast Comments at p. 23.

²¹ See e.g., Comments of AT&T at p. 11; Comments of Centurylink at p. 9.

²² AT&T Comments at p. 11.

²³ ATIS Comments at pp. 8-9.

²⁴ Centurylink Comments at pp. 12-13

Commission proposed cybersecurity mandatory reporting requirement would be inconsistent with that approach adopted in the 2015 “Executive Order on Promoting Private Sector Cybersecurity Information Sharing that directed the Secretary of Homeland Security to encourage the development and formation of Information Sharing and Analysis Organizations for the purpose of encouraging private sector entities to share cyber threat information on a voluntary basis.”²⁵ T-Mobile adds that the Commission’s “confusing proposal” essentially amounts to an effort to inappropriately “convert NORS into a threat incident reporting system.”²⁶

Instead of new regulatory mandates, ATIS supports the collaborative approach proposed by several commenters. Comcast explains that there are many public-private partnerships that are effectively addressing cybersecurity issues and recommends that the Commission focus on network outage issues “and allow cybersecurity voluntary initiatives to continue unimpeded.”²⁷ CenturyLink takes a similar view that, because substantial industry collaboration is ongoing and voluntary initiatives are underway to share this type of information, and additional Commission regulation is unwarranted.²⁸ ACA supports the view espoused by ATIS in its comments that, given the on-going work to address cybersecurity issues within the Communications Security, Reliability and Interoperability Council (CSRIC), the Commission should not adopt any requirements related to cybersecurity until CSRIC completes its work on these issues.²⁹

C. If New BIAS Reporting Obligations Are Adopted, the Commission Should Modify the Proposed Rules to Reflect Industry Input

In its comments, ATIS opposed the Commission’s proposed throughput-based metric for BIAS outage reporting and recommend an alternative approach based on the existing user-

²⁵ ACA Comments at pp. 30-31.

²⁶ T-Mobile Comments at pp. 16-17.

²⁷ Comcast Comments at p. 34.

²⁸ CenturyLink Comments at p. 13.

²⁹ ACA Comments at p. 31.

minute metric used for VoIP and legacy services.³⁰ ATIS notes that, to the extent that outage reporting obligations are extended to BIAS, there is broad support among commenters that: (1) “hard down” outages should be based on impact of outages on consumers (i.e., on a user-minute rather than throughput-based metric); (2) providers should not be required to report on performance degradation; and (3) BIAS providers should not be required to serve as a central reporting entity for broadband outages.

1. “Hard Down” BIAS Outages” Should be Based on User Impacts Not Throughput

In the *FNPRM*, the Commission proposed a through-put based metric for hard-down BIAS outages. As noted in its comments, ATIS opposes this throughput metric, noting among other things that the metric is not technically neutral, would create a rigid framework that is ill-suited to the dynamic nature of networks, would provide no public safety benefit and would be resource-intensive for both providers and the Commission.³¹

Many commenters share ATIS’ view on this issue. Comcast notes that using a bandwidth-based metric “would necessarily and inappropriately assign less importance to service disruptions affecting consumers subscribing to lower-bandwidth service, since 25 Mbps is pre-determined to be the baseline bandwidth input for this throughput calculation.”³² CenturyLink notes that a throughput-based metric “can also be misleading because, while it tracks the size of the pipe that is down, it does not track how much capacity is actually being used on the pipe.”³³

³⁰ ATIS Comments at pp. 9-11.

³¹ ATIS Comments at pp. 10-11.

³² Comcast Comments at p. 19.

³³ CenturyLink Comments at p. 14.

ATIS agrees with USTelecom that the Commission’s throughput-based metric is “deeply flawed, and should be abandoned.”³⁴ As noted by many commenters, the problems with the proposed throughput-based metric are numerous and varied. WISPA also notes that, under the Commission’s proposed metric, the faster the speed, the more likely it is that an outage would need to be reported. Therefore, “a provider offering 100 Mbps download speeds would be required to report a ‘hard down’ outage before a provider offering 25 Mbps download speeds...”³⁵ The Voice on the Net Coalition (VON Coalition) similarly notes that “[a] throughput-based metric could penalize providers that offer HD voice or that utilize codecs that use more bandwidth.”³⁶ Verizon also notes the disparate impact of the threshold, noting that “[c]ompanies that compete in the marketplace by investing in and offering higher speed and high capacity networks would be disadvantaged vis-à-vis providers that only offer lower speed services... because the same amount of throughput loss would affect the former’s customers much less than the latter’s, in terms of affected users, geography, and usefulness of the service to customers—if it affected them at all.”³⁷

ACA also notes that the proposed threshold is “set far too low and could result in numerous insignificant but reportable outages affecting a small number of high-capacity users, while potentially missing more impactful wide-scale outages affecting numerous low-capacity users.”³⁸ ITTA – The Voice of Mid-Size Communications Companies (ITTA) explains that the proposed threshold “would lead to a massive over reporting regime as compared to current standards, potentially leading to 750 times as much reporting.”³⁹ USTelecom agrees and notes

³⁴ USTelecom Comments at p. 6.

³⁵ WISPA Comments at p. 17.

³⁶ VON Coalition Comments at pp. 6-7.

³⁷ Verizon Comments at p. 5.

³⁸ ACA Comments at p. 18.

³⁹ ITTA Comments at p. 8.

that the proposed throughput-based metric “will significantly compromise the value of its reporting framework by causing over-reporting of purported outages, which will not benefit public safety or yield meaningful data.”⁴⁰ Comcast notes further that “as user speeds increase, BIAS providers would be forced to file reports about an increasing number of reportable events, even as the number of customers actually affected by each event declined.”⁴¹ Verizon provides a tangible example, noting that under the proposed metric, “it appears that nearly every ‘outage’ within Verizon’s GPON 2.4 Gbps network could be reportable in 30 minutes, whether or not 1, 10, 100, or 1000 households were affected.”⁴²

The complexity of the throughput threshold was also correctly noted by commenters, including AT&T who noted that threshold “is unnecessarily complicated given various network configurations, including design and bandwidth. It would be more costly to implement than the already-familiar 900,000 user minute threshold.”⁴³ ACA notes that the threshold is also impractical because “it fails to take into account variables in bandwidth usage based on how the connectivity is being used, by whom, and at what points of time during the day.”⁴⁴ Comcast notes a bandwidth-based metric would “require a BIAS provider to have an integrated system capable of monitoring, in real time, the size of the pipe and speeds that are provisioned to each and every end user, as well as the health of every dynamic connection.”⁴⁵ Verizon also explains that the 25 Mbps threshold was never intended for wireless and that “[m]obile broadband providers in particular do not have visibility into throughput loss at that level of granularity

⁴⁰ USTelecom Comments at p. 7.

⁴¹ Comcast Comments at p. 20.

⁴² Verizon Comments at p. 6.

⁴³ AT&T Comments at p. 17.

⁴⁴ ACA Comments at p. 18.

⁴⁵ Comcast Comments at p. 20.

within their networks; throughput speeds in a wireless broadband network will vary geographically due to factors like cell site density, topography, and peak usage.”⁴⁶

Instead of the throughput-based metric proposed by the Commission, there is broad support among the industry for the alternative approach recommended by ATIS. CenturyLink, Verizon, ACA, Comcast, and AT&T among others, all reject the throughput based metric and recommend use of the existing metric based on 900,000 user minutes and 30 minutes duration.⁴⁷ AT&T takes a similar approach to ATIS, recommending a user-minute based approach based on outages affecting non-redundant IP switching elements instead of the throughput-based metric proposed by the Commission.⁴⁸ CenturyLink further recommends excluding events that affect fewer than 5,000 users, which helps ensure that reportable outages are limited to events with wide customer impact.⁴⁹ ATIS supports identifying a minimum number of users that would be affected by an outage.

Finally, ATIS supports CenturyLink’s recommendation that BIAS outages should be reported to the Commission only to the extent they affect 911 special facilities as defined in Section 4.5(e)(1) of the Commission’s rules.⁵⁰

If new reporting obligations are imposed on BIAS, ATIS urges the Commission to consider this input and to abandon its proposal for throughput-based metric.

⁴⁶ Verizon Comments at p. 6.

⁴⁷ *See also*, CenturyLink Comments at p. 14, Verizon Comments at p. 3, ACA Comments at p. 19, Comcast Comments at pp. 18- 20, AT&T Comments at p. 17.

⁴⁸ AT&T Comments at p. 17.

⁴⁹ CenturyLink Comments at p. 14

⁵⁰ CenturyLink Comments at p. 10.

2. Providers Should Not Be Required to Report on Performance Degradation

As noted in its comments, ATIS does not believe that performance metrics are necessary because such data would not necessarily indicate whether a customer-impacting event has occurred. ATIS notes that the Commission's proposed performance metrics are widely opposed by the industry.

As an initial matter, ATIS supports the input provided by commenters that there is no evidence that a broadband degradation reporting requirement is needed to ensure that service providers protect public safety. CTIA, for example, notes that the Commission in the *FNPRM* “supplies no technical data or analysis showing why customers would be adversely affected by changes in these inherently dynamic characteristics of network performance, or what appropriate benchmarks would be. Nor does it explain why collecting such granular data would advance the stated objectives of this proceeding.”⁵¹

Even if reporting on performance degradation would provide meaningful information, commenters such as Comcast note that trying to craft a useful metric would prove difficult, if not impossible, because the performance metrics are not indicators of an outage and “[m]any well-designed applications, services, and protocols have the ability to absorb levels of degradation.”⁵² AT&T explains in its comments that “[T]hroughput, packet loss and latency are quality of service (QoS) standards that are not appropriately used as outage metrics as “[v]ariations in throughput, and some degree of packet loss and latency are inherent in all IP networks. Networks engineered to eliminate them would be highly inefficient and prohibitively expensive.”⁵³ ACA similarly notes that the Commission's proposal would be difficult, if not impossible, to

⁵¹ CTIA Comments at p. 12. *See also* Comcast Comments at p. 14, NTCA Comments at p. 6, VON Coalition Comments at p. 5.

⁵² Comcast Comments at p. 14.

⁵³ AT&T Comments at p. 18.

implement because “there is no set industry metric for determining when performance degradation passes from merely degraded service to effective loss of service.”⁵⁴ The impact of latency on the usability of an end user connection also will vary widely depending on the application. As WISPA notes, “[v]oice services can tolerate consistent latency up to 150 ms one-way (ITU-T G.114). Interactive video games prefer very low latency. Streaming media, and many other protocols, can accept very high latency with no discernable degradation.”⁵⁵ Vonage Holdings Corporation (Vonage) similarly notes that “[a]s was the case in 2011, when the FCC first suggested the idea of using service quality metrics to determine outages for VoIP services, this approach remains unworkable due to the variability between different types of VoIP services—such as over-the-top versus fixed—and different VoIP codecs used to provide service.”⁵⁶

ACA agrees that, while throughput, packet loss and latency may serve as useful metrics for general network provisioning and monitoring, in most cases these performance characteristics “do not define a functional loss of service to individual customers, particularly for IP-based services delivered over shared network facilities within the greater interconnected Internet ecosystem.”⁵⁷ AT&T explains that “[e]ven in periods when these metrics are affected, priority protocols ensure that time-sensitive voice packets go through while less sensitive traffic, such as email, may be delayed.”⁵⁸

Implementing the proposed performance metrics in the context of mobile BIAS is particularly problematic as noted by many commenters. CTIA reports that a requirement to

⁵⁴ ACA Comments at p. 11.

⁵⁵ WISPA Comment at p. 21.

⁵⁶ Vonage Comments at p. 3.

⁵⁷ ACA Comments at p. 13.

⁵⁸ AT&T Comments at pp. 18-19.

report decreases in mobile BIAS throughput would be “extremely burdensome, if not infeasible, for CMRS providers to implement given the dynamic nature of wireless networks in which traffic is managed to optimize quality, reliability and speed. Providers would need to purchase and install devices to measure throughput across their entire networks, as well as monitoring systems to notify personnel when throughput decreased by the amount set by the Commission so that the mandated reports could be created and filed.”⁵⁹

The significant costs of the proposed performance metrics were also noted by many commenters. Comcast estimates that, even if the performance degradation monitoring were to take place at the most highly aggregated level, it could cost “millions of dollars to initially acquire and install the necessary monitoring equipment.”⁶⁰ ITTA adds that “measuring packet loss and then (over)reporting on it is a costly and painstaking process ... with little to no benefit to the Commission’s public safety mission.”⁶¹ ATIS agrees with the many commenters who note the exorbitant costs (i.e., in the magnitude of multi-millions of dollars per provider) of developing and implementing the capabilities for the proposed rules.

WISPA further provides that, underlying the proposed new performance metrics, is a misconception that “broadband providers typically monitor and can easily measure throughput variations, packet loss and latency, and have the time and knowhow to constantly calculate whether a ‘degradation’ in service is reportable or not.” This is not true; instead, providers typically perform measurements based on a sampling of the user base, and are often only used when troubleshooting specific incidents.”⁶² ITTA similarly notes that this Commission proposal to implement performance metrics would extravagantly increase their costs by requiring “carriers

⁵⁹ CTIA Comments at pp. 10-11.

⁶⁰ Comcast Comments at p. 18.

⁶¹ ITTA Comments at p. 13.

⁶² WISPA Comments at p. 22.

to measure throughput in real time, rather than on a sample basis (as many currently do), which is challenging and costly in its own right.”⁶³

Moreover, AT&T notes that the “QoS metrics (throughput, latency, and packet loss) are point-to-point measurements, not general network measurements. It would generally be impossible to measure these QoS metrics from every network endpoint (including customer endpoints) to every network element involved in BIAS because this becomes an N-Squared problem and would therefore be impossible to provide.”⁶⁴

Finally, ATIS agrees with ACA that, “[b]ecause the utility of receipt of performance degradation information is low and the likely costs high, any mandatory reporting requirement for BIAS and interconnected VoIP should continue to be based only for “hard down” outages and should be based on data and information available to network operators in the ordinary course of business that does not require the purchase and installation of costly monitoring equipment.”⁶⁵

Therefore, as ATIS noted in its comments, if the Commission adopts new reporting obligations for BIAS, the Commission should limit reportable events to “hard down” outages and not adopt its proposed performance degradation reporting obligations. As Comcast notes, this approach would be simpler, more equitable, less burdensome, better promote consistent outage reporting and better align with the Commission’s stated aim of addressing network reliability concerns that may interrupt access to emergency response services and business connectivity.⁶⁶

⁶³ ITTA Comments at p. 10.

⁶⁴ AT&T Comments at p. 19.

⁶⁵ ACA Comments at pp. 16-17.

⁶⁶ Comcast Comments at pp. 11-13.

3. BIAS Providers Should Not Be Required to Serve as a Central Reporting Point for Broadband Outages.

As noted in its comments, to the extent that the Commission moves forward with new BIAS reporting rules, ATIS does not support requiring BIAS providers to be the sole entity responsible for reporting outages.

The Commission should reject this proposal because as ATIS and many other comments have noted, broadband providers may have little to no control over or insight into other networks.⁶⁷ As WISPA notes, providers should not accept the duty of collecting all records and statistics “[w]ithout any ability to control the upstream carrier’s activities or remediate the outage.”⁶⁸ The provider serving as the central reporter, as AT&T explains, also “would have no authority to compel cooperation in reporting and cannot be responsible, including with potential enforcement liability, for timely or accurate reporting of another provider over which it has no control.”⁶⁹ Hughes Network Systems, LLC (Hughes) explains that “requiring providers to report on the source of outages originating on other networks would entail speculation as to the source or scope of the outage and yield multiple, potentially conflicting reports that could hinder any FCC investigation.”⁷⁰

Furthermore, as noted by USTelecom, the characteristics of broadband networks make the Commission’s proposal to require BIAS providers to act as a central reporting point “particularly problematic, since disruptions in the network can result from occurrences in other parts of the network, ranging from wholesale IP carriers, to consumer premises equipment (CPE) defects, software malfunctions, viruses and malware. Consequently, any reporting mechanism

⁶⁷ ITTA Comments at p. 17.

⁶⁸ WISPA Comments at pp. 22-23.

⁶⁹ AT&T Comments at p. 12.

⁷⁰ Hughes Network Systems Comments at p. 3.

designed to address IP network outages will, by design, only capture a small slice of a much larger network ecosystem – and provide a skewed view of the source and frequency of outages.”⁷¹

Finally, designating BIAS providers as the central reporting point for broadband outages could actually limit and/or obscure the Commission’s visibility into such outages, USTelecom notes, because “some non-BIAS providers may not report such outage information to the BIAS provider.”⁷²

Given the lack of any enunciated policy reasons for BIAS providers to serve as central reporting points and the challenges described above, ATIS does not believe that the burden (and potential liability) associated with this proposal could possibly be warranted.

D. The Commission’s Call Failure Proposal is Unworkable, and Unnecessary

In its comments, ATIS opposed the Commission’s proposals to adopt outage reporting rules pertaining to call failures in radio and local access networks because these conditions are not indicative of customer impact or a network outage. There is broad opposition among commenters to the Commission call failure reporting proposals.

AT&T agrees with ATIS on this matter, noting that “the proposed rules would not capture outages at all and would only capture whether the engineered capacity of a particular facility was exceeded... The Commission’s proposed metrics, if adopted, would flood the Commission with useless data—telling it nothing about whether customers’ calls were affected at all—while simultaneously creating significant costs of administration and compliance for

⁷¹ USTelecom Comments at p. 13.

⁷² *Id.*

providers.”⁷³ Verizon also agrees because “the data proposed to be collected would not show whether equipment is ‘susceptible to failure in mass calling events.’”⁷⁴ T-Mobile USA, Inc. (T-Mobile) correctly explains that, instead of collecting information that can be used to prevent outages, “the wireless call blocking proposal would effectively convert the Part 4 rules from an outage reporting regime to a network performance monitoring system.”⁷⁵

CTIA similarly recommends against adoption of the proposed rules for radio networks for a numerous reasons, including the fact that proposed rule does not involve any outages or disruptions and goes far beyond the purpose of the Part 4 rules. CTIA further notes that the proposed rules could force carriers to file reports even when their networks are performing as designed, and even when cell sites are not only not “out,” but are in fact fully operational.”

CenturyLink agrees and further notes that, “even if the reporting threshold were modified to capture actual sustained call blockages, the proposed rule should still be rejected. The network is engineered to appropriately size these connections to allow for busy traffic times and as a result, CenturyLink does not actively monitor loop carrier systems, rather relying on on-going engineering reviews to ensure that the facilities remain appropriately sized to meet the traffic volumes. To do more would be a costly and inefficient endeavor given the upcoming transition of the legacy network.”⁷⁶

T-Mobile agrees that compliance with the rules would require significant and unnecessary burdens to service providers, noting that “to determine whether call blocking has occurred for 75 percent of the time over a 30 minute interval, carriers would have to monitor

⁷³ AT&T Comments at p. 28.

⁷⁴ Verizon Comments at p.7.

⁷⁵ T-Mobile Comment at p. 7.

⁷⁶ Centurylink Comments at p. 23.

capacity on a minute-by-minute basis in a wide variety of environments under conditions that may vary on a sector-by-sector or cell site-by-cell site basis.”⁷⁷ AT&T agrees that the proposed rules would require substantial reporting burdens and adds that, “[g]iven the transient nature of congestion, it would be nearly impossible to ascertain the root cause for a congestion event this short...Re-engineering network metrics to provide more frequent, real-time aggregation for no business purpose, simply to satisfy a regulatory fiat, would be enormously costly and complex.”⁷⁸

For these reasons, ATIS recommends against adoption of the proposed rules pertaining to call failures in radio and local access networks.

E. Many Commenters Join ATIS in Supporting a Streamlined Two-Step Outage Reporting Process

In its comments, ATIS recommended that the Commission adopt a streamlined, two-step process for the reporting of communications outages VoIP and legacy services, and recommended that this same two-step process apply to BIAS in the event that BIAS reporting is mandated. Under ATIS’ proposal, providers would be required to submit Notifications within 24 hours of the discovery of a reportable outage and a Final Notification within 30 days of the submission of the Notification.

ATIS notes that the need for, and benefits of, a streamlined reporting process has been identified by numerous commenters.⁷⁹ For example, T-Mobile supports a two-step process and the elimination of Initial Reports, noting that these reports “contain little additional information

⁷⁷ T-Mobile Comments at p. 9.

⁷⁸ AT&T Comments at p. 29.

⁷⁹ ITTA Comments at p. 14; T-Mobile Comments at p. 14; VON Coalition Comments at pp. 9-11; AT&T Comments at p. 13; Centurylink Comments at p. 20; ACA Comments at pp. 29-30; Comcast Comments at p. 26; USTelecom Comments at p. 10; Comtech Telecommunications Corp Comments at pp. 3-4.

beyond that contained in the notification” but impose substantial costs on carriers.⁸⁰

CenturyLink agrees that the three-phase reporting process creates a significant amount of duplicative work “without any considerable gain in knowledge.”⁸¹ ACA notes that “requiring providers both to notify the Commission within 120 minutes of discovery of a reportable outage and then to file an Initial Report within 72 hours would be enormously burdensome for smaller providers.”⁸²

ACA further notes that extending the time for the filing of Notification to 24 hours would not diminish the value of these Notifications as receiving notifications within 120 minutes (as required by the current rules) does not provide any demonstrable benefit over receiving the Notifications within 24 hours “especially since the latter is likely to be both more complete and more accurate.”⁸³

Many commenters also have noted the burden of the existing reporting process, the costs of which do not appear to have been fully considered by the Commission. Missing from the Commission’s assessment of costs appear to be factors such as the costs of developing, operating and maintaining tracking mechanisms,⁸⁴ troubleshooting efforts, reviewing reports and training and/or hiring new employees to comply with the requirements.⁸⁵

ATIS disagrees with commenters that appear to equate outage reporting with service restoration efforts.⁸⁶ Whether an outage is reportable or not does not in any way affect service

⁸⁰ T-Mobile Comments at p. 16.

⁸¹ Centurylink Comments at p. 20.

⁸² ACA Comments at p. 28.

⁸³ ACA Comments at p. 28.

⁸⁴ T-Mobile Comments at p. 14.

⁸⁵ VON Coalition Comments at p. 11.

⁸⁶ *See also*, New York State Public Service Commission (NYPSC) Comments at p. 10 (“Not requiring reporting for two hours in the event of a major outage could lead to widespread emergency communications and economic impacts.”).

providers' strong incentive to restore service to customers in a timely manner. Service providers would strive to restore service quickly even in the absence of outage reporting requirements. In fact, as pointed out by numerous parties, outage reporting rules can actually hamper restoration efforts because the individuals responsible for outage reporting are often the same individuals who are operationally responsible for addressing and responding to network outages.⁸⁷

F. ATIS Urges the Commission to Safeguard NORS Data by Appropriately Limiting State and Federal Agency Access to and Usage of this Data

In its comments, ATIS recommended that, if access to NORS is permitted by state and federal agencies, critical protections must be in place to ensure the confidentiality of this information. This includes, among other things, ensuring that state laws allow for the maintenance of confidential information. On this point, ATIS agrees with ITTA that “as a fundamental underlying principle, to the extent state agencies have their own standards of confidentiality, the Commission’s confidentiality protections must be a floor, regardless of the substance of these state-specific provisions.”⁸⁸

ATIS also agrees with AT&T that, to ensure that changes to state laws do not jeopardize the confidentiality of outage data, “the Commission should require states to certify annually that providers’ outage reports are not subject to any state open-record laws and to notify the Commission within 48 hours if the state’s laws or rules no longer exempt these reports from public disclosure so that the Commission may eliminate that state’s access to the NORS database.”⁸⁹

⁸⁷ See also, USTelecom Comments at pp. 8-9.

⁸⁸ ITTA Comments at p. 19; See also CenturyLink Comments at p. 18.

⁸⁹ AT&T Comments at p. 22.

In addition to ensuring that states and federal agencies have a statutory basis for protecting sensitive outage information, there is also a need to ensure that there are adequate protections in place before access to NORS data could be provided to states or federal agencies.⁹⁰ Therefore, in addition to the safeguards proposed by ATIS in its comments, ATIS also supports the additional safeguards that have been proposed by other commenters:

- NORS data should be shared with only those state or federal agency employees that have a direct and urgent need to know and that agree to use NORS data consistent with the purposes for which it was provided by carriers.⁹¹
- Before obtaining NORS data, agency employees should be required to attest that they are directly employed by the agency and have the necessary qualifications, as determined in advance by the Commission, to access such information due to their specific national security or emergency preparedness role.⁹²
- An agency granted access to NORS reports should be required to disclose to the carrier whose report it obtains which agency employees have access.⁹³
- Agencies should be required to verify that only valid, active accounts exist and the Commission should audit all state and federal NORS accounts every six months, with any accounts that have not been used in six months being shut down to reduce the security risk of maintaining large numbers of unused accounts.⁹⁴
- Access to NORS data must be strictly limited to state and public utility commission officials, not third parties.⁹⁵
- State or agency officials should be required to affirmatively request access to NORS data.⁹⁶
- The Commission should require states to train their authorized employees on the proper handling of NORS data and what steps the employee should take if the data is disclosed in violation of those safeguards.”⁹⁷

⁹⁰ See also, CTIA Comments at pp. 20-21, USTelecom Comments at p. 16, Centurylink Comments at pp. 18-19, AT&T Comments at pp. 21-24.

⁹¹ CTIA Comments at p. 20.

⁹² *Id.*

⁹³ CTIA Comments at p. 21.

⁹⁴ *Id.*

⁹⁵ Centurylink Comments at p. 18.

⁹⁶ ITTA Comments at p. 19; Centurylink Comments at p. 19.

⁹⁷ AT&T Comments at p. 23; See also ITTA Comments at p. 20.

In addition to protecting the data from unauthorized access and disclosure, ATIS also believes that additional restrictions on the use of data are necessary. ATIS therefore agrees with AT&T that the Commission “should restrict state use of the NORs data to the evaluating the cause of outages in order to monitor communications network functionality within a state.”⁹⁸

Finally, ATIS believes that there is a need to avoid unnecessary and burdensome duplication between state and Commission outage reporting regimes. To address this issue, ATIS recommends that, if state access to NORs data is provided, it should be provided only to those states: (1) with reporting obligations that are consistent with Part 4 requirements and that have laws in place to prevent the disclosure of outage data and agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data; or (2) without reporting regulations and that have laws in place to prevent the disclosure of outage data and agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data. The need to prevent unnecessary duplicative outage reporting regulatory regimes is also supported by commenters and ATIS believes that such a restriction is essential to preventing significant increases to the burdens associated with outage reporting.⁹⁹

⁹⁸ AT&T Comments at p. 24.

⁹⁹ AT&T Comments at p. 24, ITTA Comments at p. 20, Centurylink Comment at p. 19.

II. Conclusion

ATIS appreciates the opportunity to provide its further input to the *FNPRM* and urges the Commission to consider the recommendations above.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Thomas Goode".

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